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(54) Title: COMPOSITIONS AND METHODS FOR THE THERAPY AND DIAGNOSIS OF ACNE VULGARIS

N-terminal and Mass-Spec Sequencing of the
P. acnes proteins Z I&II Proteins

GRQVDP LVCNDASCLQLRAVPDERNPQ ^{START} MKVKFLAAPLIIVGALM

APAAFSGATAHAA ^{ZI} PVAPIVAVSATQPNKTL SVAAEQKELQVVNA
N-ter peptide: ZI MS: ZI

RIASLLDTOKSAKEAFAPANVLNIIGKLLTARRIKEALVNVKIG
^{ZII}
N-ter peptide: ZII

GIAFLKSIPTRY ELLVTMYDTYNGAAHTLQDKA QPAHSHVFLEL
MS: ZI & ZII

VHASVLLVTVSATSDQLKDEMAAVKKALAEAK MPDLKPNDVA
MS: ZI & ZII

TPYTKLSRVLQRIRFORNTCVLPFKRLGTIYFMSRALLKATC

VLMELVRYVSEYDQAITDYK AAYODALKAPNRLTAPVPSVCLP
MS: ZI & ZII

APAAAS

(57) Abstract: Compositions and methods for the therapy and diagnosis of acne vulgaris and other related conditions are disclosed. Compositions may comprise one or more *Propionibacterium acnes* proteins, immunogenic portions thereof, or polynucleotides that encode such portions. Alternatively, a therapeutic composition may comprise an antibody that binds a *Propionibacterium acnes* protein, antigen presenting cell that expresses a *Propionibacterium acnes* protein, or a T cell that is specific for cells expressing such a protein. Such compositions may be used, for example, for the prevention and/or treatment of acne.

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